

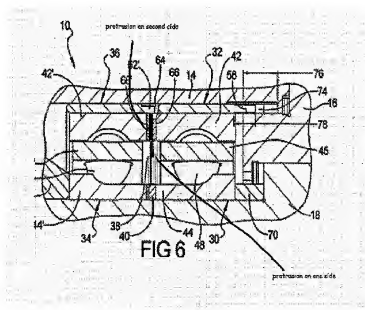
## REMARKS

Applicant wishes to thank the Examiner for the detailed remarks. Claim 40 has been amended. New claims 52-56 are presented. Accordingly, claims 8, 10-12, 14-16, 26, 28, 32-35, 40, and 43-56 are pending.

### Drawings

Applicant wishes to thank the Examiner for agreeing with Applicant that the protrusions or raised areas were properly shown in the drawings as originally filed.

Upon further review of figure 6, the examiner believes to have located the protrusion of opposite sides of the spring.



The spring, in the examiner's view, is illustrated above in black. If this is the case, then the original drawing should be filed, with proper cross hatching. Amended figure 6 as filed July 9, 2008 will not be entered as it deviates significantly from what was originally illustrated. Figure 2 filed on November 27, 2007 should also be filed in response to this Office Action. No other drawings filed November 27, 2007 will be entered.

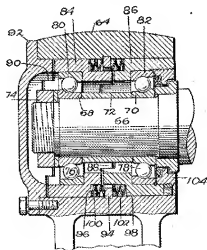
The only issue which thus remains is the proper cross-hatching of generally flat spring 38. Applicant wishes to note that the manner in which the cross-section of generally flat spring 38 in Figure 6 results in only a portion of the generally flat spring 38 in cross-hatched. That is, the

generally flat spring 38 is an annular member in which the upper portion of the generally flat spring 38 as shown in Figure 6 is cross-hatched while the lower portion of the generally flat spring 38 in Figure 6 (the portion of the generally flat spring which is generally viewable between the bearing cages 45, 45', and the inner races 44, 44') is not affected by the cross-section such that the lower portion is shown in full. Applicant considers Figure 6 as submitted to be proper. Nonetheless, Applicant is willing to further amend Figure 6 to the satisfaction of the Examiner.

Although not adding new matter, Applicant has deleted Figure 7 as the Examiner apparently now considers Figure 7 redundant.

### **35 U.S.C. §103**

Claims 8, 10-12, 14-16, 26, 28, 32-35, 40, and 43-51 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Baninger* (1851561) in view of *Vogelsberger* (5624193). Applicant respectfully traverses these rejections as there is absolutely no teaching, suggestion, or motivation to modify *Baninger* in view of *Vogelsberger* as proposed. The Examiner admits that *Baninger* does not disclosed a generally flat spring, but does disclose a spring element in contact with both the first and second bearing cups. Leaving aside for the moment that the *Baninger* spring 100 and 102 interact with only one sleeve 84, 86 and the ring 94, *Baninger* reacts each spring 100 and 102 against the ring 94 which is located in the journal box 64. The journal box 64 is located about the outer diameter of sleeves 84, 86 which contain the outer race rings 80 and 82. That is, the ring is in an outboard position relative the bearings.



**Fig. 3.**

Contrary thereto, the washer 7 of *Vogelsberger* includes inwardly directed resilient tabs 12 which are located at an inboard position relative the bearing.

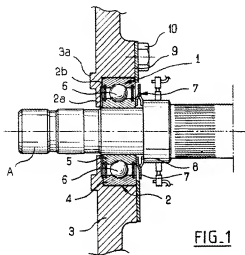


FIG. 1

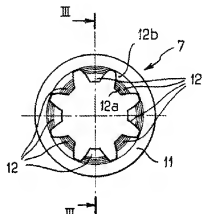


FIG. 2

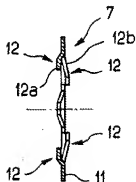


FIG. 3

It is improper to modify the base reference in such a way that it ruins the goal or function of the base reference. Since the reaction surface of *Baninger* is the ring 94 which is located in an outboard position, incorporation of the washer 7 of *Vogelsberger* would render *Baninger* inoperable because the radially inboard inwardly directed resilient tabs would not contact the ring 94. Because the Examiner's proposed combination is inoperable, the proposed combination is improper. Claims 8, 10-12, 14-16, 26, 28, 32-35, 40, and 43-51 are properly allowable.

Even if the combination were properly made, there are differences between the claimed invention and the teachings of the cited references so that the combination does not meet the features of Applicant's claims.

As discussed above, each of the springs 100 and 102 interact with only one sleeve section 84, 86 and the ring 94, not with both said first bearing cup and said second bearing cup as recited by Applicant. *Vogelsberger*, even if the combination were proper, fails to correct this deficiency. In fact, the *Vogelsberger* spring 7 is located between a bearing inner race and a fixed shoulder 8. Applicant respectfully submits that the claims are properly allowable.

The proposed combination, even if proper, fails to suggest a generally flat spring which is formed into a circumferential wave shape to axially preload said first bearing cup relative said second bearing cup as also recited by Applicant. The Examiner relies completely on *Vogelsberger* for what the Examiner interprets as a generally flat spring. However, the *Vogelsberger* spring 7 simply cannot meet the limitation of being formed into a circumferential wave shape as the resilient tabs 12 would only be compressed together between the inner race and the shoulder 8. Under no proper interpretation would compressing the resilient tabs 12 towards each other (best seen in Figure 1 of *Vogelsberger*) form a circumferential wave shape as described and claimed by Applicant.

The large bases of the resilient tabs 12 are situated at the flat outer annulus 11. Each of these tabs 12 is terminated at its small base by a flat 12a for applying thrust parallel to the plane of the flat annulus. Each flat 12a is connected to the flat annulus 11 via a resilient portion 12b, with the resilient portions 12b being inclined alternately to one side and to the other side of the plane of the flat annulus 11 around the periphery of the washer 7.

Alternate flats 12a thus bear against a plane edge of the inner ring 5 and against the shoulder 8. They thus serve to apply prestress to the bearing 1 and the shaft A by implementing surface-against-surface contacts therewith. The inside diameter defined by the flats 12a for a given resilient washer 7 varies as a function of the extent to which the washer is compressed.

Applicant respectfully submits that the claims are also properly allowable for this reason.

#### **Claims 40, 52, and 54**

Dependent claims 40, 52, and 54 recite wherein said generally flat spring includes raised areas on opposite sides of a planar surface, the raised areas distributed at circumferential locations such that the raised areas are circumferentially offset. The spring of *Vogelsberger* fails to disclose or suggest raised areas on opposite sides of a planar surface as recited by Applicant.

The spring of *Vogelsberger* discloses only tabs which extend radially from an outer annulus 11 towards the inside of the washer 7. Claims 40, 52 and 54 are thus also properly allowable.

New claims 53, 55, and 56 recite further features which are neither disclosed nor suggested by the cited references.

The Commissioner is authorized to charge \$260 to Deposit Account No. 21-0279 for five additional dependent claims.

Applicant respectfully submits that this case is in condition for allowance. Applicant's representative can be contacted at the number indicated below.

Respectfully Submitted,

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